# DT01 Rec'd PCT/PT0 2 1 OCT 2004

# 0598-069-EXT-SEQ.ST25 SEQUENCE LISTING

<110> INSERM

IGR

KOSMATOPOULOS, Kostas

ALVES, Pédro

<120> EPHA2 ANTIGEN T EPITOPES

<130> MJPah598/69EX

<160> 10

<170> PatentIn version 3.1

<210> 1

<211> 976

<212> PRT

<213> Homo sapiens

<400> 1

Met Glu Leu Gln Ala Ala Arg Ala Cys Phe Ala Leu Leu Trp Gly Cys
10 15

Ala Leu Ala Ala Ala Ala Ala Gln Gly Lys Glu Val Val Leu Leu 20 25 30

Asp Phe Ala Ala Ala Gly Gly Glu Leu Gly Trp Leu Thr His Pro Tyr 35 40 45

Gly Lys Gly Trp Asp Leu Met Gln Asn Ile Met Asn Asp Met Pro Ile 50 60

Tyr Met Tyr Ser Val Cys Asn Val Met Ser Gly Asp Gln Asp Asn Trp 65 70 75 80

Leu Arg Thr Asn Trp Val Tyr Arg Gly Glu Ala Glu Arg Ile Phe Ile 85 90 95

Glu Leu Lys Phe Thr Val Arg Asp Cys Asn Ser Phe Pro Gly Gly Ala 100 105 110

## 0598-069-EXT-SEQ.ST25

Ser Ser Cys Lys Glu Thr Phe Asn Leu Tyr Tyr Ala Glu Ser Asp Leu 115 120 125 Asp Tyr Gly Thr Asn Phe Gln Lys Arg Leu Phe Thr Lys Ile Asp Thr 130 140 Ile Ala Pro Asp Glu Ile Thr Val Ser Ser Asp Phe Glu Ala Arg His 145 150 155 160 Val Lys Leu Asn Val Glu Glu Arg Ser Val Gly Pro Leu Thr Arg Lys 165 170 175 Gly Phe Tyr Leu Ala Phe Gln Asp Ile Gly Ala Cys Val Ala Leu Leu 180 185 190 Ser Val Arg Val Tyr Tyr Lys Lys Cys Pro Glu Leu Leu Gln Gly Leu 195 200 205 Ala His Phe Pro Glu Thr Ile Ala Gly Ser Asp Ala Pro Ser Leu Ala 210 220 Thr Val Ala Gly Thr Cys Val Asp His Ala Val Val Pro Pro Gly Gly 225 235 240 Glu Glu Pro Arg Met His Cys Ala Val Asp Gly Glu Trp Leu Val Pro 245 250 255 Ile Gly Gln Cys Leu Cys Gln Ala Gly Tyr Glu Lys Val Glu Asp Ala 260 265 270 Cys Gln Ala Cys Ser Pro Gly Phe Phe Lys Phe Glu Ala Ser Glu Ser 275 280 285 Pro Cys Leu Glu Cys Pro Glu His Thr Leu Pro Ser Pro Glu Gly Ala 290 295 300 Thr Ser Cys Glu Cys Glu Glu Gly Phe Phe Arg Ala Pro Gln Asp Pro 305 310 315 Ala Ser Met Pro Cys Thr Arg Pro Pro Ser Ala Pro His Tyr Leu Thr 325 Ala Val Gly Met Gly Ala Lys Val Glu Leu Arg Trp Thr Pro Pro Gln
340 345 350 Asp Ser Gly Gly Arg Glu Asp Ile Val Tyr Ser Val Thr Cys Glu Gln 355 360 365 Cys Trp Pro Glu Ser Gly Glu Cys Gly Pro Cys Glu Ala Ser Val Arg 370 375

#### 0598-069-EXT-SEQ.ST25

Tyr Ser Glu Pro Pro His Gly Leu Thr Arg Thr Ser Val Thr Val Ser 385 390 395 400 Asp Leu Glu Pro His Met Asn Tyr Thr Phe Thr Val Glu Ala Arg Asn 405 415 Gly Val Ser Gly Leu Val Thr Ser Arg Ser Phe Arg Thr Ala Ser Val 420 430 Ser Ile Asn Gln Thr Glu Pro Pro Lys Val Arg Leu Glu Gly Arg Ser 435 440 445 Thr Thr Ser Leu Ser Val Ser Trp Ser Ile Pro Pro Pro Gln Gln Ser 450 455 460 Arg Val Trp Lys Tyr Glu Val Thr Tyr Arg Lys Lys Gly Asp Ser Asn 480 Ser Tyr Asn Val Arg Arg Thr Glu Gly Phe Ser Val Thr Leu Asp Asp 485 490 495 Leu Ala Pro Asp Thr Thr Tyr Leu Val Gln Val Gln Ala Leu Thr Gln 500 510 Glu Gly Gln Gly Ala Gly Ser Lys Val His Glu Phe Gln Thr Leu Ser 515 520 525 Pro Glu Gly Ser Gly Asn Leu Ala Val Ile Gly Gly Val Ala Val Gly 530 540 Val Val Leu Leu Leu Val Leu Ala Gly Val Gly Phe Phe Ile His Arg 545 550 560 Arg Arg Lys Asn Gln Arg Ala Arg Gln Ser Pro Glu Asp Val Tyr Phe 565 570 575 Ser Lys Ser Glu Gln Leu Lys Pro Leu Lys Thr Tyr Val Asp Pro His 580 585 590 Thr Tyr Glu Asp Pro Asn Gln Ala Val Leu Lys Phe Thr Thr Glu Ile 595 600 605 His Pro Ser Cys Val Thr Arg Gln Lys Val Ile Gly Ala Gly Glu Phe 610 620 Gly Glu Val Tyr Lys Gly Met Leu Lys Thr Ser Ser Gly Lys Lys Glu 625 630 635 640 Val Pro Val Ala Ile Lys Thr Leu Lys Ala Gly Tyr Thr Glu Lys Gln 645 650 655

#### 0598-069-EXT-SEQ. ST25

Arg val Asp Phe Leu Gly Glu Ala Gly Ile Met Gly Gln Phe Ser His 660 670 His Asn Ile Ile Arg Leu Glu Gly Val Ile Ser Lys Tyr Lys Pro Met 675 680 685 Met Ile Ile Thr Glu Tyr Met Glu Asn Gly Ala Leu Asp Lys Phe Leu 690 700 Arg Glu Lys Asp Gly Glu Phe Ser Val Leu Gln Leu Val Gly Met Leu 705 710 715 720 Arg Gly Ile Ala Ala Gly Met Lys Tyr Leu Ala Asn Met Asn Tyr Val 725 730 735 His Arg Asp Leu Ala Ala Arg Asn Ile Leu Val Asn Ser Asn Leu Val 740 745 750 Cys Lys Val Ser Asp Phe Gly Leu Ser Arg Val Leu Glu Asp Asp Pro
755 760 765 Glu Ala Thr Tyr Thr Thr Ser Gly Gly Lys Ile Pro Ile Arg Trp Thr 770 780 Ala Pro Glu Ala Ile Ser Tyr Arg Lys Phe Thr Ser Ala Ser Asp Val 785 790 795 800 Trp Ser Phe Gly Ile Val Met Trp Glu Val Met Thr Tyr Gly Glu Arg 805 810 815 Pro Tyr Trp Glu Leu Ser Asn His Glu Val Met Lys Ala Ile Asn Asp 820 825 830 Gly Phe Arg Leu Pro Thr Pro Met Asp Cys Pro Ser Ala Ile Tyr Gln 835 840 845 Leu Met Met Gln Cys Trp Gln Gln Glu Arg Ala Arg Arg Pro Lys Phe 850 860 Ala Asp Ile Val Ser Ile Leu Asp Lys Leu Ile Arg Ala Pro Asp Ser 865 870 875 Leu Lys Thr Leu Ala Asp Phe Asp Pro Arg Val Ser Ile Arg Leu Pro 885 890 895 Ser Thr Ser Gly Ser Glu Gly Val Pro Phe Arg Thr Val Ser Glu Trp 900 905 910 Leu Glu Ser Ile Lys Met Gln Gln Tyr Thr Glu His Phe Met Ala Ala 915 920 925

### 0598-069-EXT-SEQ.ST25

```
Gly Tyr Thr Ala Ile Glu Lys Val Val Gln Met Thr Asn Asp Asp Ile
930 935
 Lys Arg Ile Gly Val Arg Leu Pro Gly His Gln Lys Arg Ile Ala Tyr
945 950 955 960
 Ser Leu Leu Gly Leu Lys Asp Gln val Asn Thr val Gly Ile Pro Ile 965 975
 <210> 2
 <211>
 <212> PRT
 <213> Human immunodeficiency virus
 <400> 2
 Ile val Gly Ala Glu Thr Phe Tyr val
 <210>
 <211>
        10
 <212>
 <213> Human herpesvirus 5
<400> 3
Arg Pro His Glu Arg Asn Gly Phe Thr Val
<210> 4
<211> 9
<212> PRT
<213> Homo sapiens
<400> 4
Ile Met Asn Asp Met Pro Ile Tyr Met
<210> 5
<211> 9
```

<212> PRT

```
0598-069-EXT-SEQ. ST25
```

```
<213> Homo sapiens
 <400> 5
 Asp Met Pro Ile Tyr Met Tyr Ser val
 <210> 6
 <211> 9
 <212> PRT
 <213> Homo sapiens
<400> 6
Val Leu Leu Leu Val Leu Ala Gly Val
<210> 7
<211> 9
<212> PRT
<213> Homo sapiens
<400> 7
Val Leu Ala Gly Val Gly Phe Phe Ile
<210> 8
<211> 9
<212> PRT
<213> Homo sapiens
<400> 8
Thr Leu Ala Asp Phe Asp Pro Arg Val
<210> 9
<211> 9
<212> PRT
<213> Artificial sequence
```

```
0598-069-EXT-SEQ.ST25
```

<220>

<223> immunogenic peptide

<400> 9

Tyr Met Pro Ile Tyr Met Tyr Ser Val

<210> 10

<211> 13

<212> PRT

<213> Hepatitis B virus

<400> 10

Thr Pro Pro Ala Tyr Arg Pro Pro Asn Ala Pro Ile Leu 1 10